

Figure 1

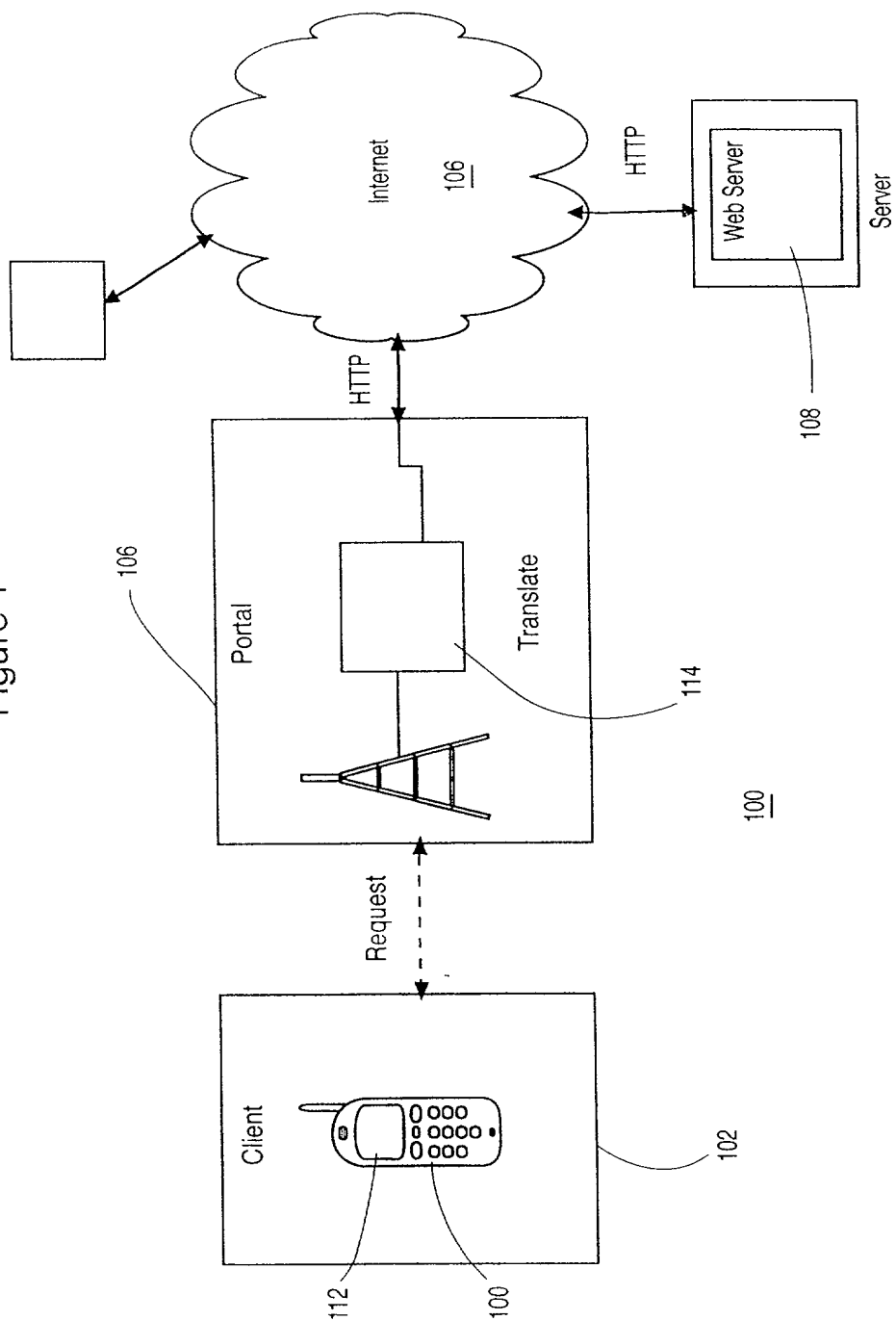
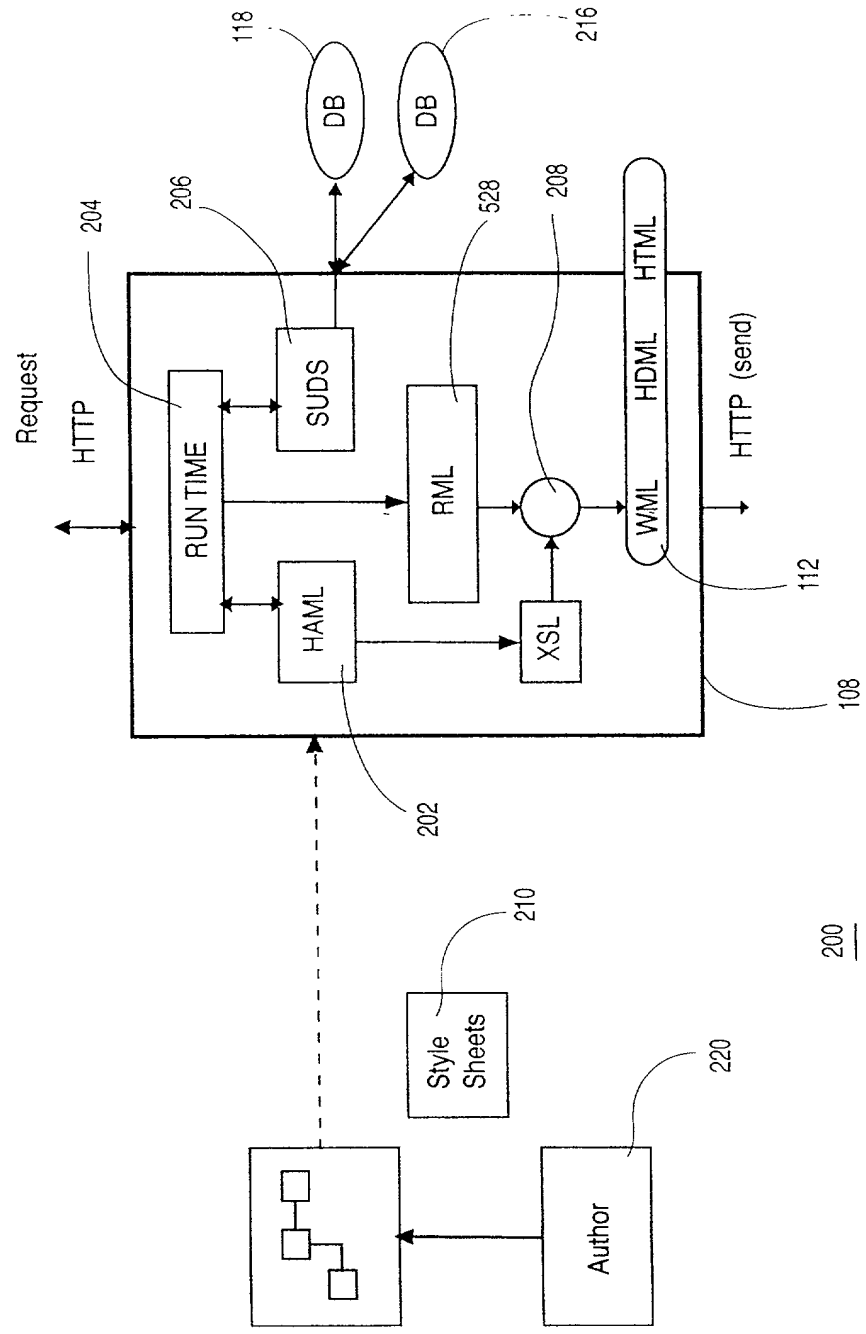


Figure 2



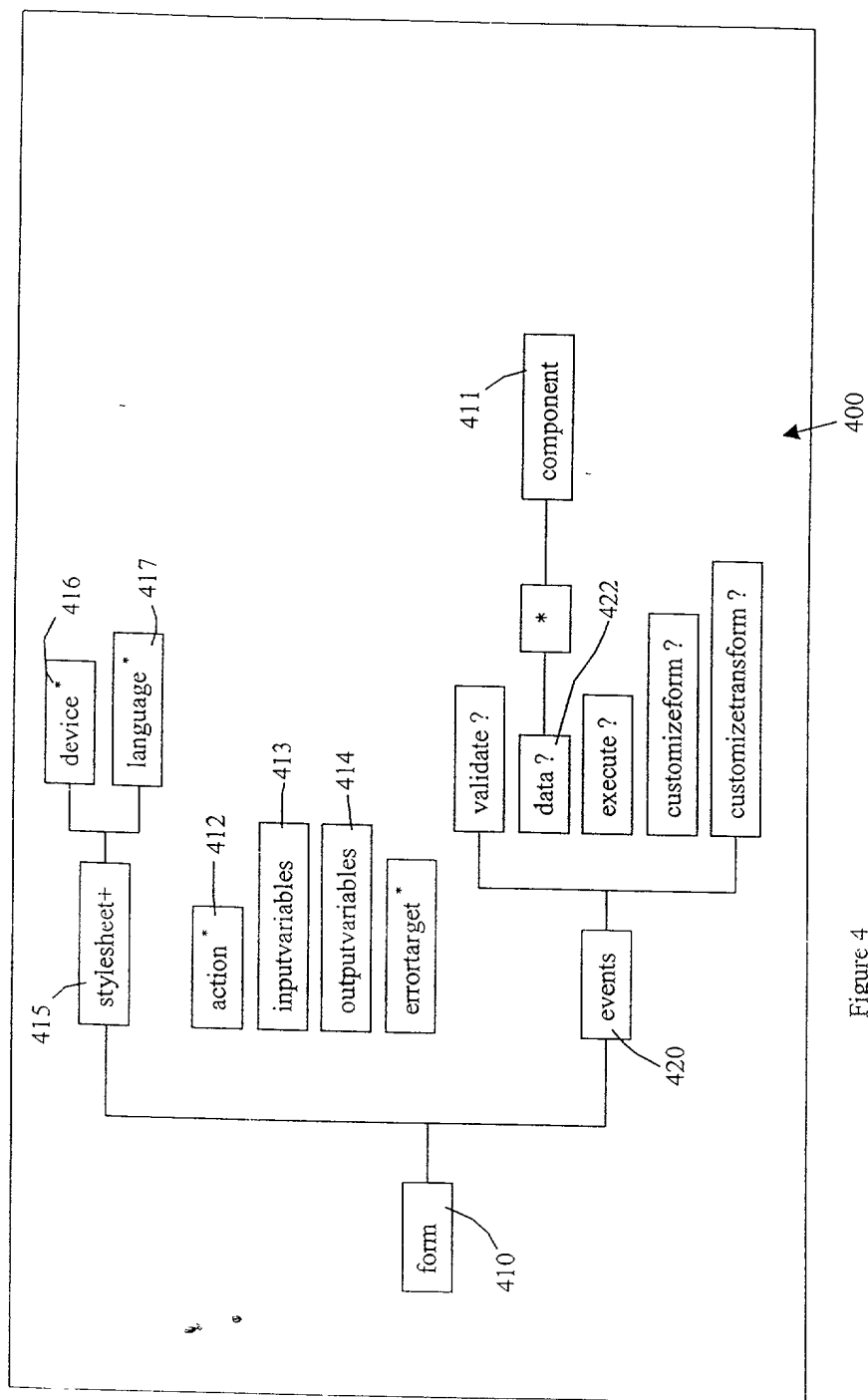


Figure 4

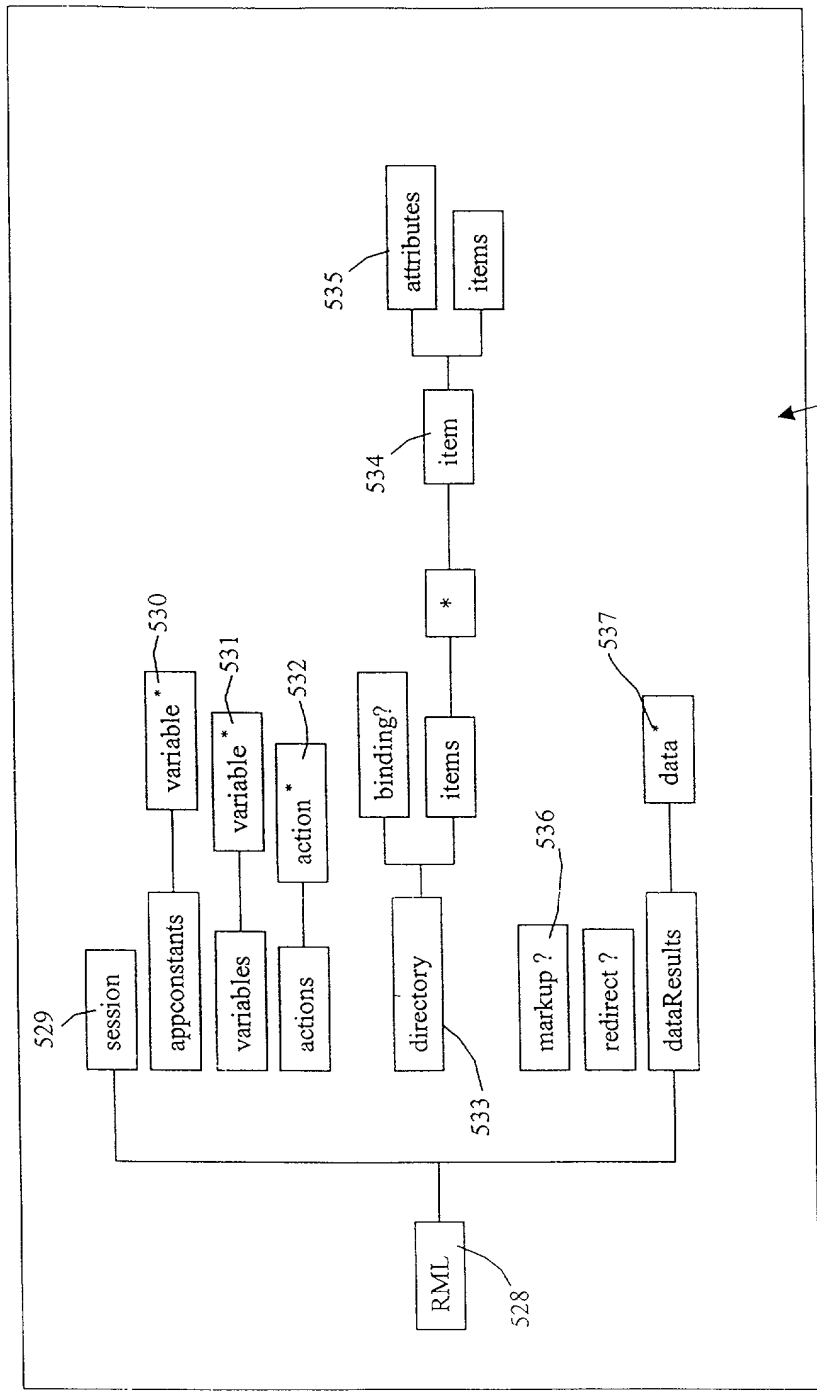


Figure 5

Figure 6

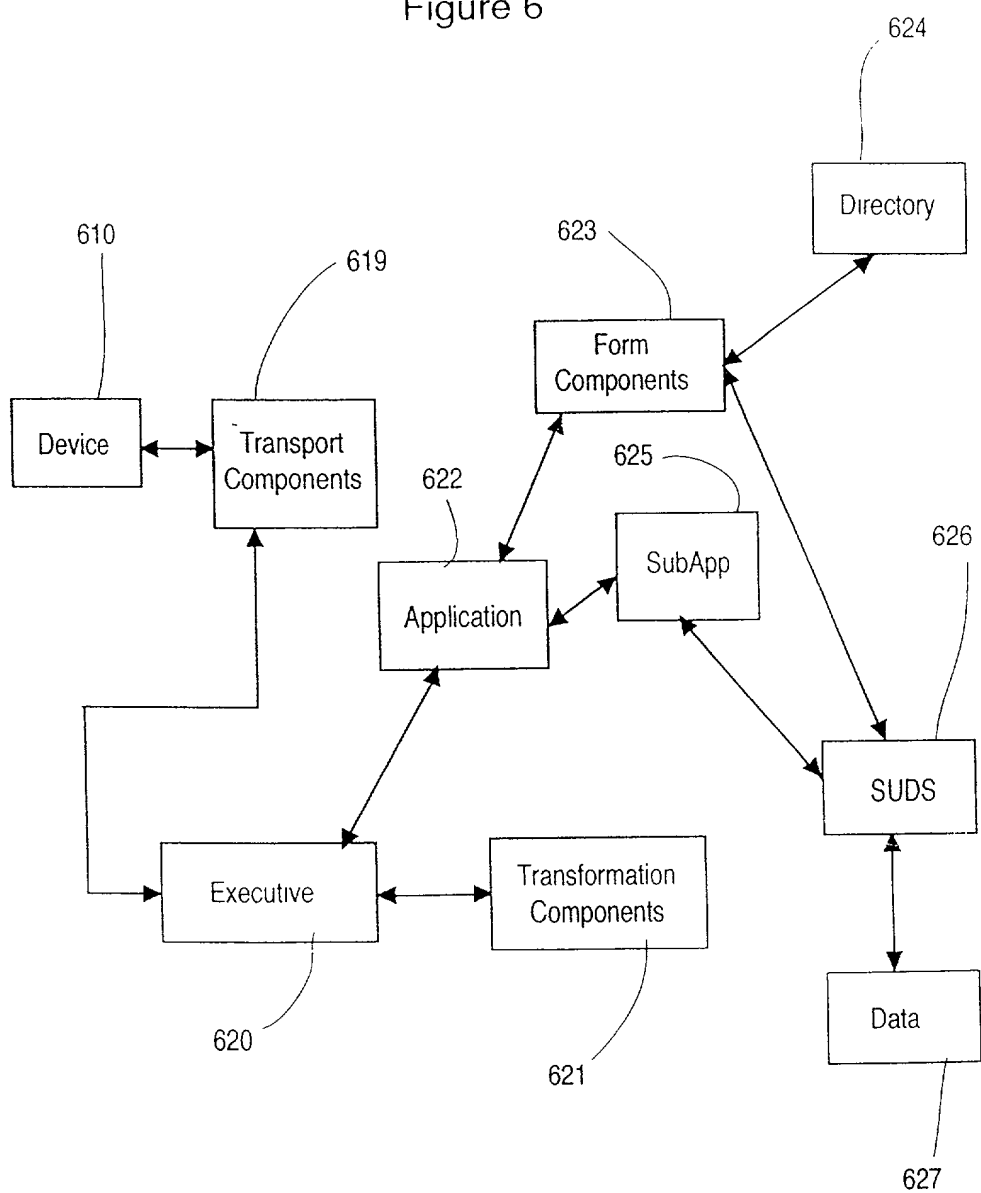


Figure 7

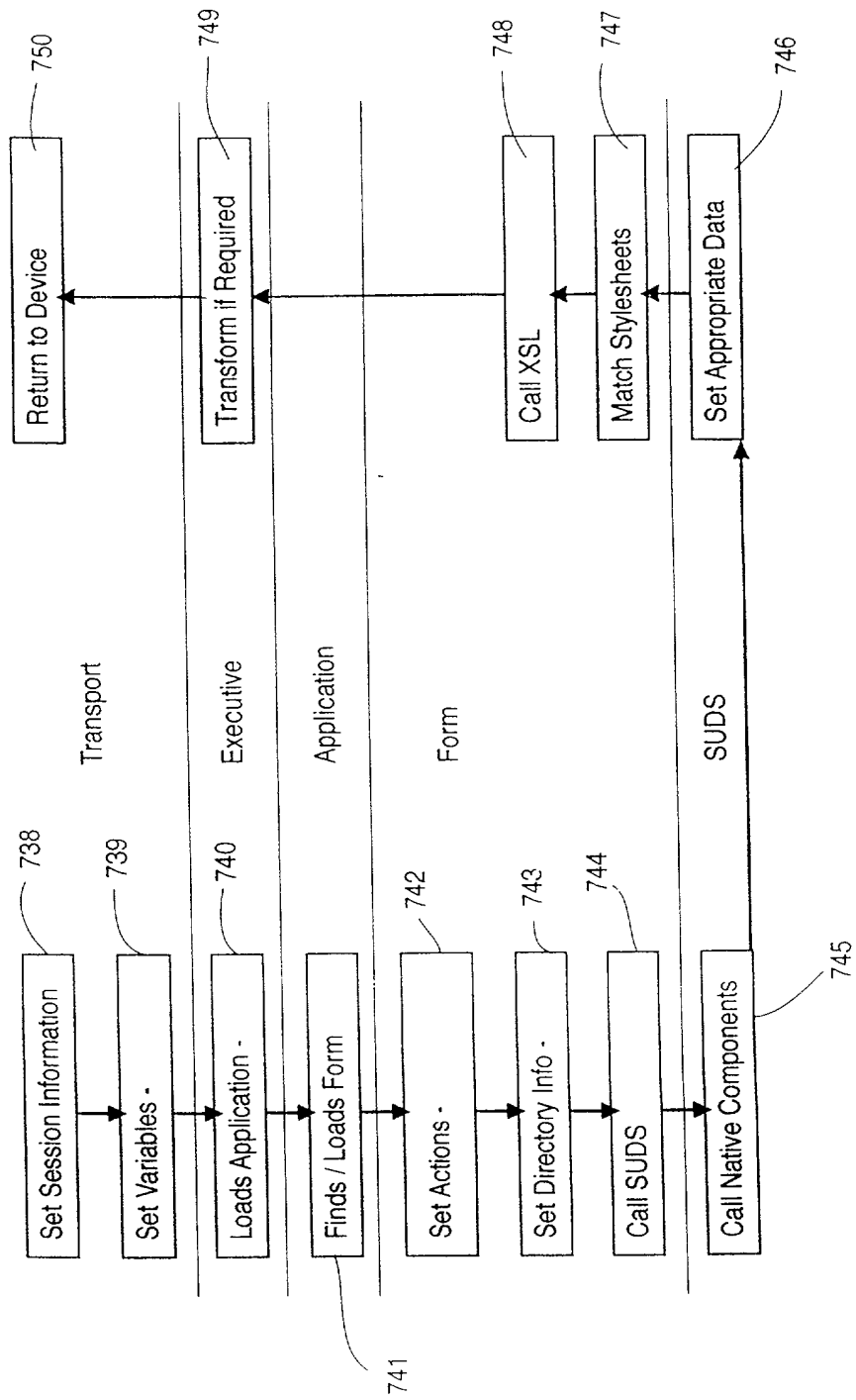
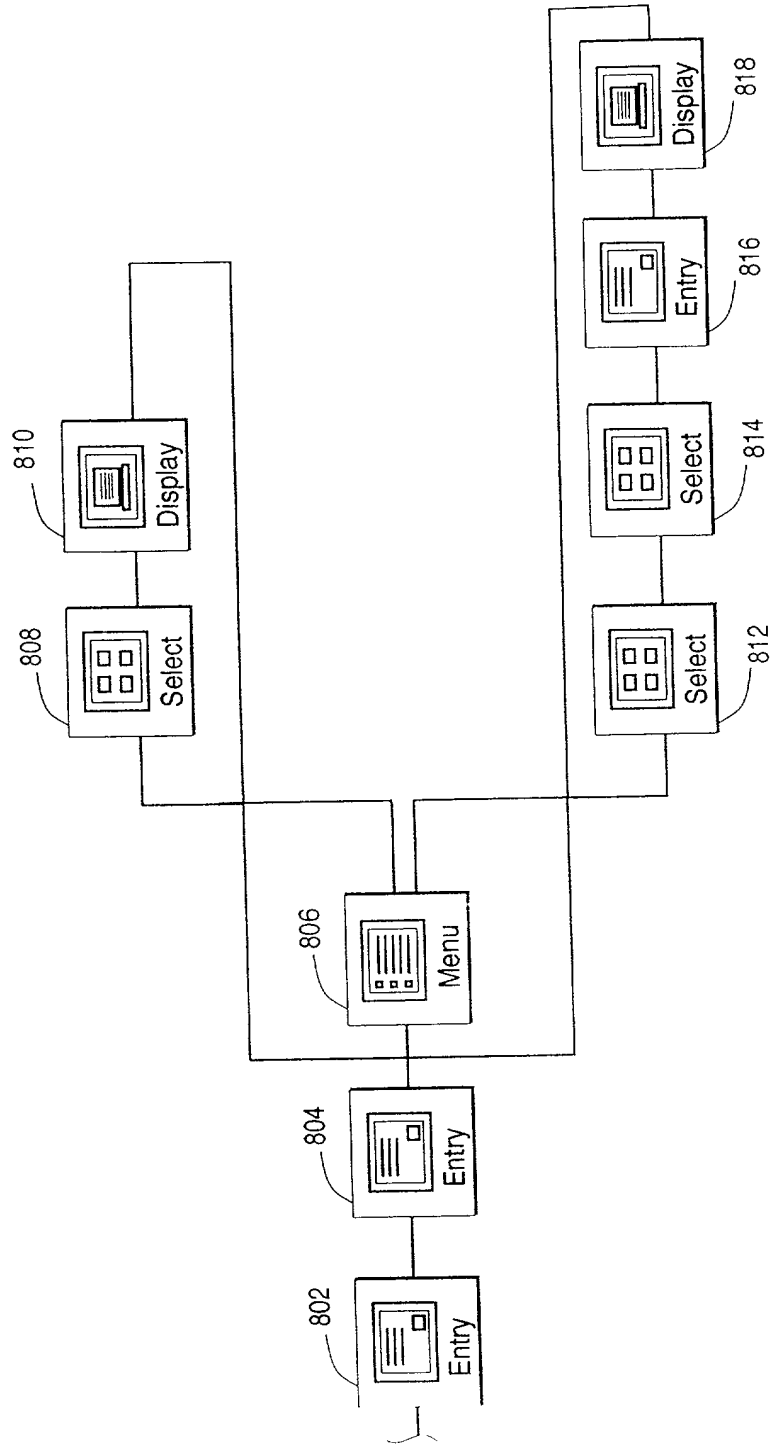


Figure 8 (a)



```

<?xml version='1.0' encoding='UTF-8'>
<application usecookies='false' id='{F6681A6F-FB7C-4901-855C-08791DDE8DC8}'
securevariables='false'>
<description version="1" name='MQBanking' />
<outtargets />
<startform totargetid='UserID' />
<subapps />
<errortarget totargetid='UserID' />
<properties>
<variable default="209.23.23.23" name="ServerIP" />
</properties>
<sessionvariables>
<variable name="Session" />
</sessionvariables>
<forms>
- <form targetid="UserID" includeheaders="false">
<stylesheet contenttype="WML11" url="http://www.mobileq.com" />
<action totargetid="Password" name="OK" />
<inputvariables />
- <outputvariables>
<variable name="UserID" />
</outputvariables>
<events />
</form>
- <form targetid="Password" includeheaders="false">
<stylesheet contenttype="WML11" url="http://www.mobileq.com" />
<action totargetid="Main" name="OK" />
- <inputvariables>
<variable name="UserID" />
</inputvariables>
- <outputvariables>
<variable name="Session" />
</outputvariables>
<events />
</form>
- <form targetid="Main" includeheaders="false">
<stylesheet contenttype="WML11" url="http://www.mobileq.com" />
<action totargetid="Account" name="Account Balance" />
<action totargetid="Bill Payment" name="Bill Payment" />
<action totargetid="Transfer" name="Account Transfer" />
<inputvariables />
<outputvariables />
<events />
</form>
- <form targetid="Account" includeheaders="false">
<stylesheet contenttype="WML11" url="http://www.mobileq.com" />
<action totargetid="Details" name="OK" />
<inputvariables />
- <outputvariables>
<variable name="AccountID" />
</outputvariables>

```

Figure 8(b)

```

    <events />
</form>
<form targetid="Details" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Main" name="OK" />
  <inputvariables>
    <variable name="AccountID" />
  </inputvariables>
  <outputvariables />
  <events />
</form>
- <form targetid="Bill Payment" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Bill" name="OK" />
  <inputvariables />
  <outputvariables>
    <variable name="AccountID" />
  </outputvariables>
  <events />
</form>
- <form targetid="Bill" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Amount" name="OK" />
  <inputvariables>
    <variable name="AccountID" />
  </inputvariables>
  <outputvariables>
    <variable name="BillID" />
    <variable name="AccountID" />
  </outputvariables>
  <events />
</form>
- <form targetid="Amount" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Confirm" name="OK" />
  <inputvariables>
    <variable name="BillID" />
    <variable name="AccountID" />
  </inputvariables>
  <outputvariables>
    <variable name="AccountID" />
    <variable name="BillID" />
    <variable name="Amount" />
  </outputvariables>
  <events />
</form>
- <form targetid="Confirm" includeheaders="false">
  <stylesheet contenttype="WML11" url="http://www.mobileq.com" />
  <action totargetid="Main" name="Cancel" />
  <inputvariables>
    <variable name="AccountID" />
    <variable name="BillID" />
  </inputvariables>

```

Figure 8(c)

<variable name= Amount />
</inputvariables>
<outputvariables>
 <variable name="AccountID" />
 <variable name="BillID" />
 <variable name="Amount" />
</outputvariables>
<events />
</form>
</forms>
<errors />
<events />
</application>

Figure 8(d)

```

<!--
<dataresults>
  <data name="source1">
    <RECORDS>
      <RECORD>
        <Blair PK="1">172-32-1176</Blair>
        <Test1 PK="1">1</Test1>
        <Test2 PK="1">2</Test2>
        <Test3 PK="1">3</Test3>
        <LastName>White</LastName>
        <FirstName>Johnson</FirstName>
      </RECORD>
      <RECORD>
        <Blair PK="1">213-46-891</Blair>
        <Test1 PK="1">1</Test1>
        <Test2 PK="1">2</Test2>
        <Test3 PK="1">3</Test3>
        <LastName>Green</LastName>
        <FirstName>Marjorie</FirstName>
      </RECORD>
      <RECORD>
        <Blair PK="1">238-95-7766</Blair>
        <Test1 PK="1">1</Test1>
        <Test2 PK="1">2</Test2>
        <Test3 PK="1">3</Test3>
        <LastName>Carson</LastName>
        <FirstName>Cheryl</FirstName>
      </RECORD>
    </a>
    <RECORD>
      <Blair PK="1">238-95-7766</Blair>
      <Test1 PK="1">1</Test1>
      <Test2 PK="1">2</Test2>
      <Test3 PK="1">3</Test3>
      <LastName>Carson</LastName>
      <FirstName>Cheryl</FirstName>
    </RECORD>
  </a>
  <a>
    <b>
      <RECORD>
        <Blair PK="1">238-95-7766</Blair>
        <Test1 PK="1">1</Test1>
        <Test2 PK="1">2</Test2>
        <Test3 PK="1">3</Test3>
        <LastName>Carson</LastName>
        <FirstName>Cheryl</FirstName>
      </RECORD>
    </b>
  </a>
</RECORDS>

```

Figure 9(a)

```

</data>
<data name= source2'>
  <RECORDS>
    - <RECORD>
      <Blair PK='1'>aaaaaa</Blair>
      <Test1 PK="1">1</Test1>
      <Test2 PK="1">2</Test2>
      <Test3 PK="1">3</Test3>
      <LastName>White</LastName>
      <FirstName>Johnson</FirstName>
    </RECORD>
    - <RECORD>
      <Blair PK="1">bbbbbbb</Blair>
      <Test1 PK="1">1</Test1>
      <Test2 PK="1">2</Test2>
      <Test3 PK="1">3</Test3>
      <LastName>Green</LastName>
      <FirstName>Marjorie</FirstName>
    </RECORD>
    - <RECORD>
      <Blair PK="1">cccccc</Blair>
      <Test1 PK="1">1</Test1>
      <Test2 PK="1">2</Test2>
      <Test3 PK="1">3</Test3>
      <LastName>Carson</LastName>
      <FirstName>Cheryl</FirstName>
    </RECORD>
    - <a>
      - <RECORD>
        <Blair PK="1">ddddddd</Blair>
        <Test1 PK="1">1</Test1>
        <Test2 PK="1">2</Test2>
        <Test3 PK="1">3</Test3>
        <LastName>Carson</LastName>
        <FirstName>Cheryl</FirstName>
      </RECORD>
    </a>
    - <a>
      - <b>
        - <RECORD>
          <Blair PK="1">eeeeeeee</Blair>
          <Test1 PK="1">1</Test1>
          <Test2 PK="1">2</Test2>
          <Test3 PK="1">3</Test3>
          <LastName>Carson</LastName>
          <FirstName>Cheryl</FirstName>
        </RECORD>
      </b>
    </a>
  </RECORDS>
</data>
</dataresults>

```

Figure 9(b)

```
<actions>
  action formatstring="" actionid="OK" querystring="?
    _SQRSIGN=A&_SQAPPID={B77444A1-8D9E-4248-A664-
    6C483F8B4540}&_ACTIONID=OK&_SQFORMID={8D7B4336-6341-
    4D2C-B2D8-49FE88D1B13A}&EmployeeID=$EmployeeID" />
</actions>
<dictionary>
  <variable />
  <variable />
</dictionary>
</rml>
```

Figure 9(c)

```

<xsl:stylesheet xmlns:xsl="http://www.w3.org/TR/WD-xsl">
  <xsl:template match="/">
    <wml>
      <head>
        <meta name="FormType" content="SQSelectForm" />
        <meta name="ListMethod" content="numeric" />
      </head>
      <card>
        <xsl:attribute name="title">qwe</xsl:attribute>
        <p>
          <select>
            <xsl:attribute name="title">qwe</xsl:attribute>
            <xsl:attribute name="name">asd</xsl:attribute>
            <xsl:for-each select="/rml/dataresults/data
              [@name='source2']/RECORD">
              <option>
                <xsl:attribute name="value">
                  <xsl:value-of select="Blair" />
                  z1z
                  <xsl:value-of select="Test1" />
                  z1z
                  <xsl:value-of select="Test2" />
                  z1z
                  <xsl:value-of select="Test3" />
                </xsl:attribute>
                <xsl:attribute name="title">
                  <xsl:value-of select="LastName" />
                  '
                  <xsl:value-of select="FirstName" />
                  '
                  <xsl:value-of select="/rml/data
                    [@name='source1']/RECORDS/RECORD/Blair" />
                </xsl:attribute>
                blah blah blah
              </option>
            </xsl:for-each>
          </select>
        </p>
        <xsl:for-each select="/rml/actions//action">
          <do>
            <xsl:attribute name="type">accept</xsl:attribute>
            <xsl:attribute name="label">
              <xsl:value-of select="@actionid" />
            </xsl:attribute>
            <go>
              <xsl:attribute name="href">
                <xsl:value-of select="@querystring" />
              </xsl:attribute>
            </go>
          </do>
        </xsl:for-each>
      </card>
    </wml>
  </template>
</xsl:stylesheet>

```

Figure 10(a)

1. **Q** What is the name of the person who was the first to see the body?

•

```

</wml>
<head>
  <meta name="FormType" content="SQSelectForm" />
  <meta name="ListMethod" content="numeric" />
</head>
<card title="Select Account">
  <p>
    <select title="Select Account" name="HoldingsAccountID">
      <option value="1" title="Acct 10314">Acct 10314</option>
      <option value="2" title="Acct 11345">Acct 11345</option>
    </select>
    <br />
  </p>
  <do type="accept" label="OK">
    <go href="?"_SQRSIGN=A&_SQAPPID={8D360BDF-E570-45E9-BEC1-
      4E5DD949C5C0}&_ACTIONID=OK&_SQFORMID={BCC091A1-63D4-
      11D3-9E34-0090273EFC3B}
      &HoldingsAccountID=${HoldingsAccountID}
      &UserID=246531&Session=1" />
    </do>
  </card>
</wml>

```

Figure 11

Figure 12

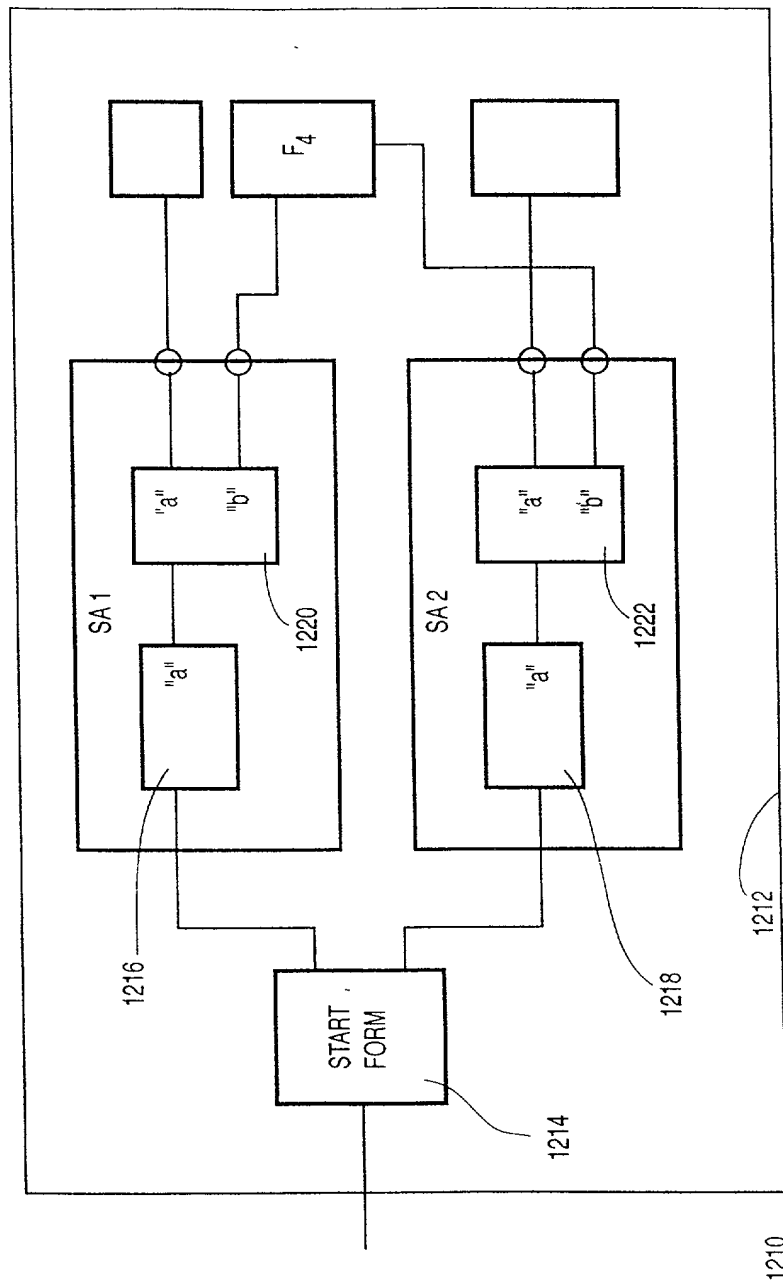


Figure 13

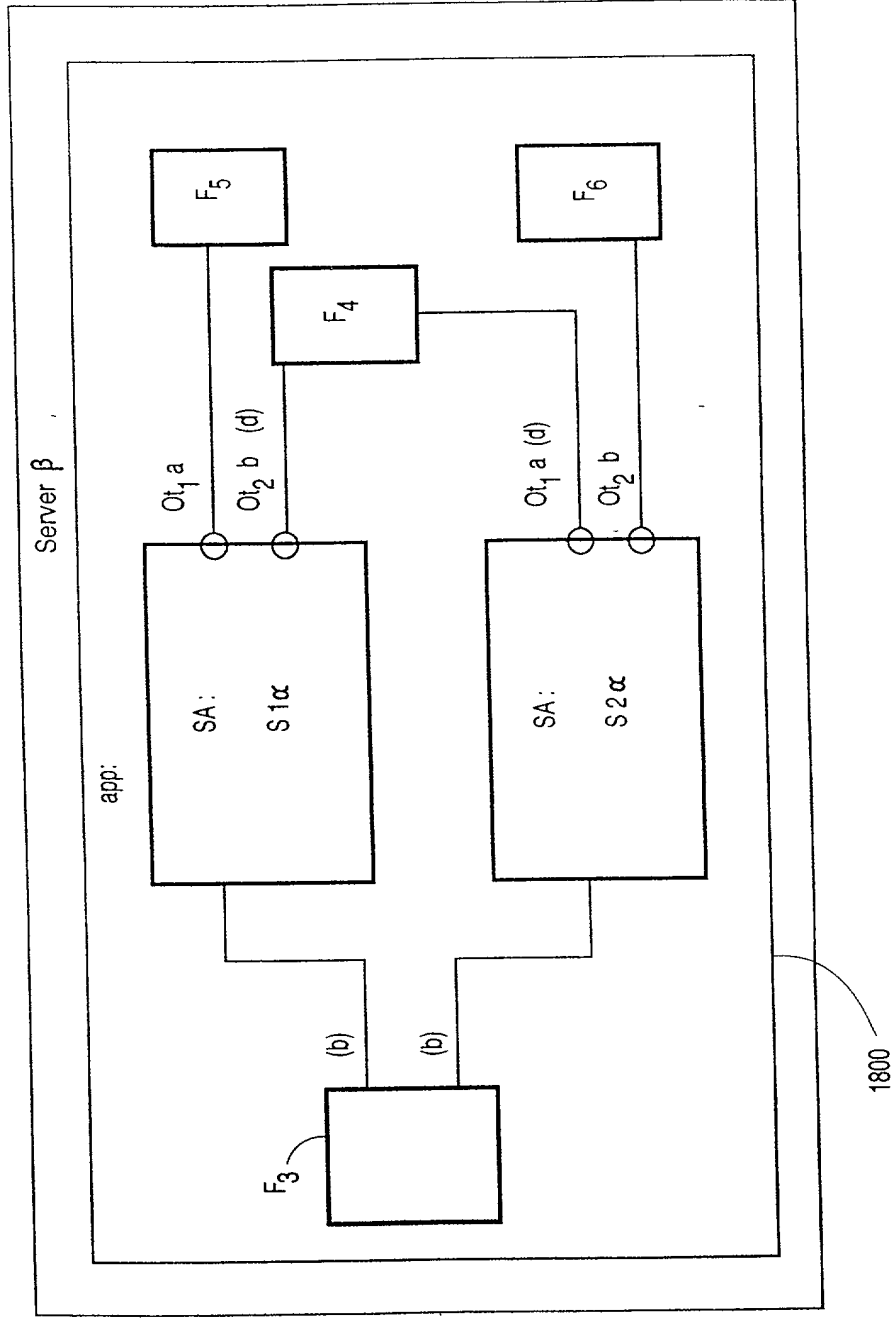
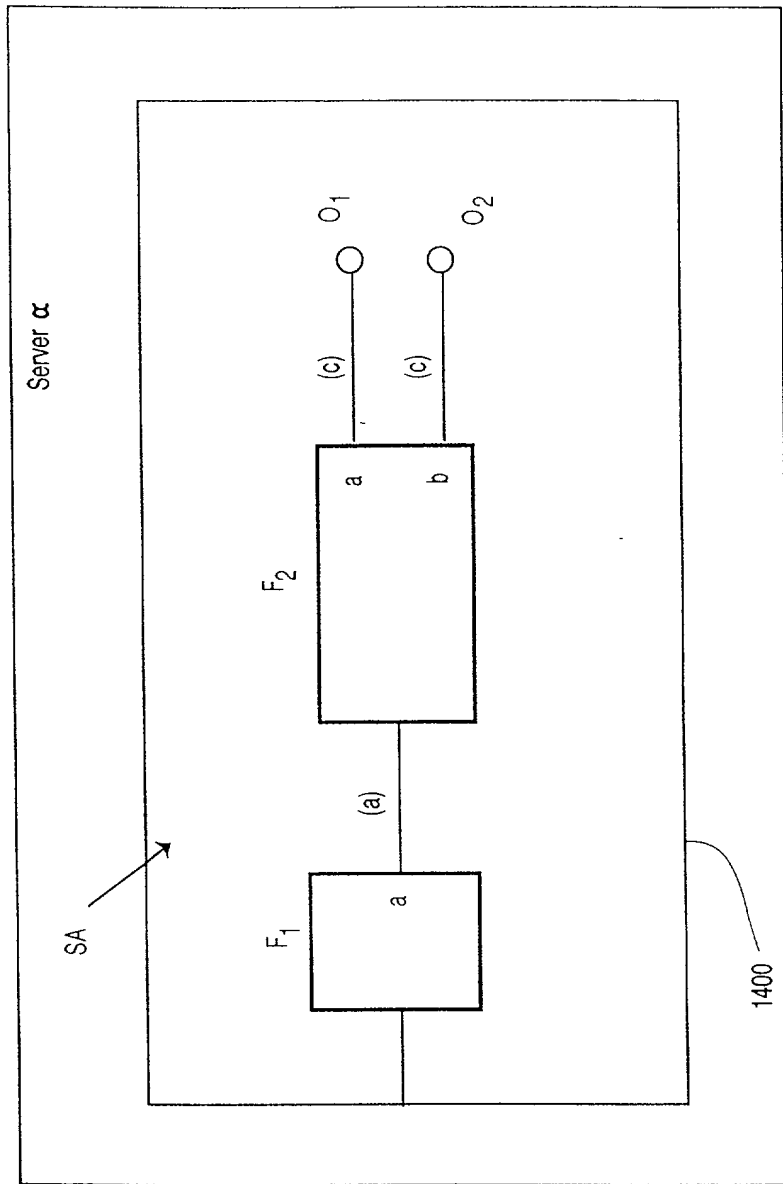


Figure 14



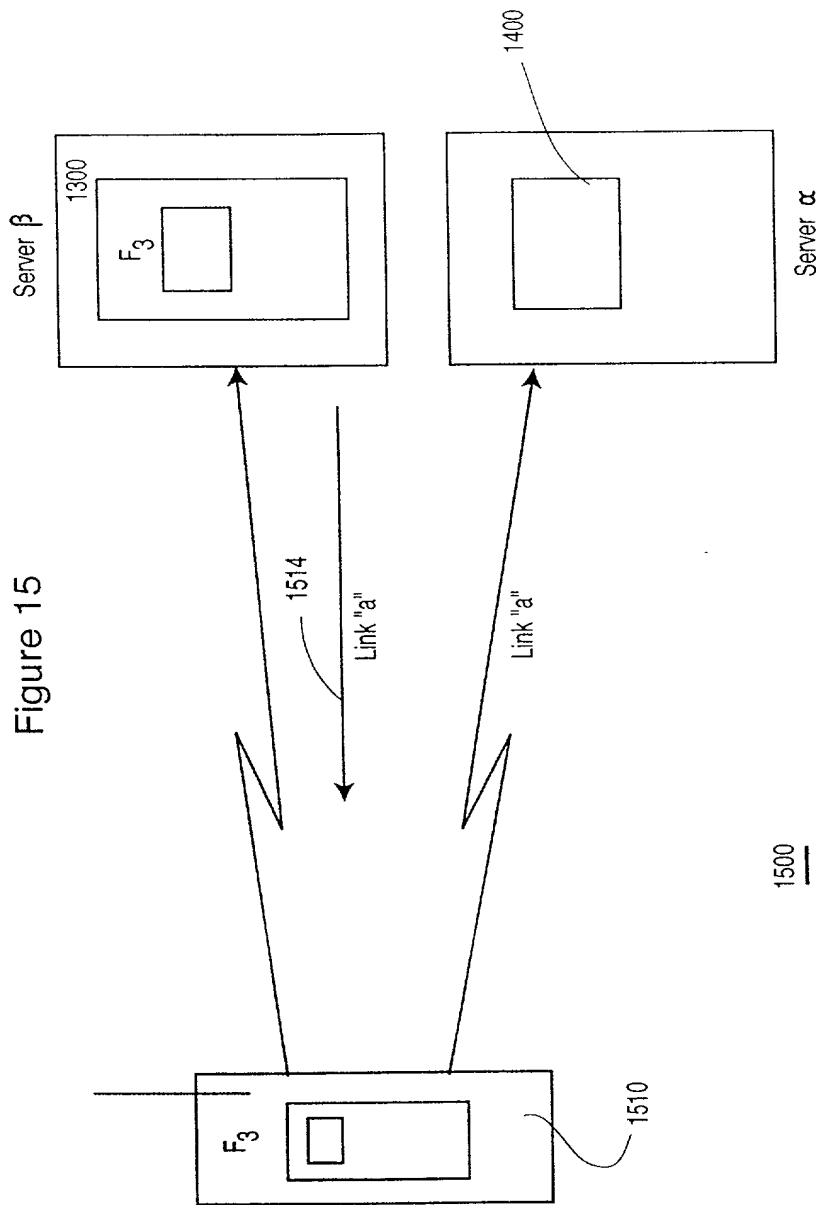


Figure 16 a

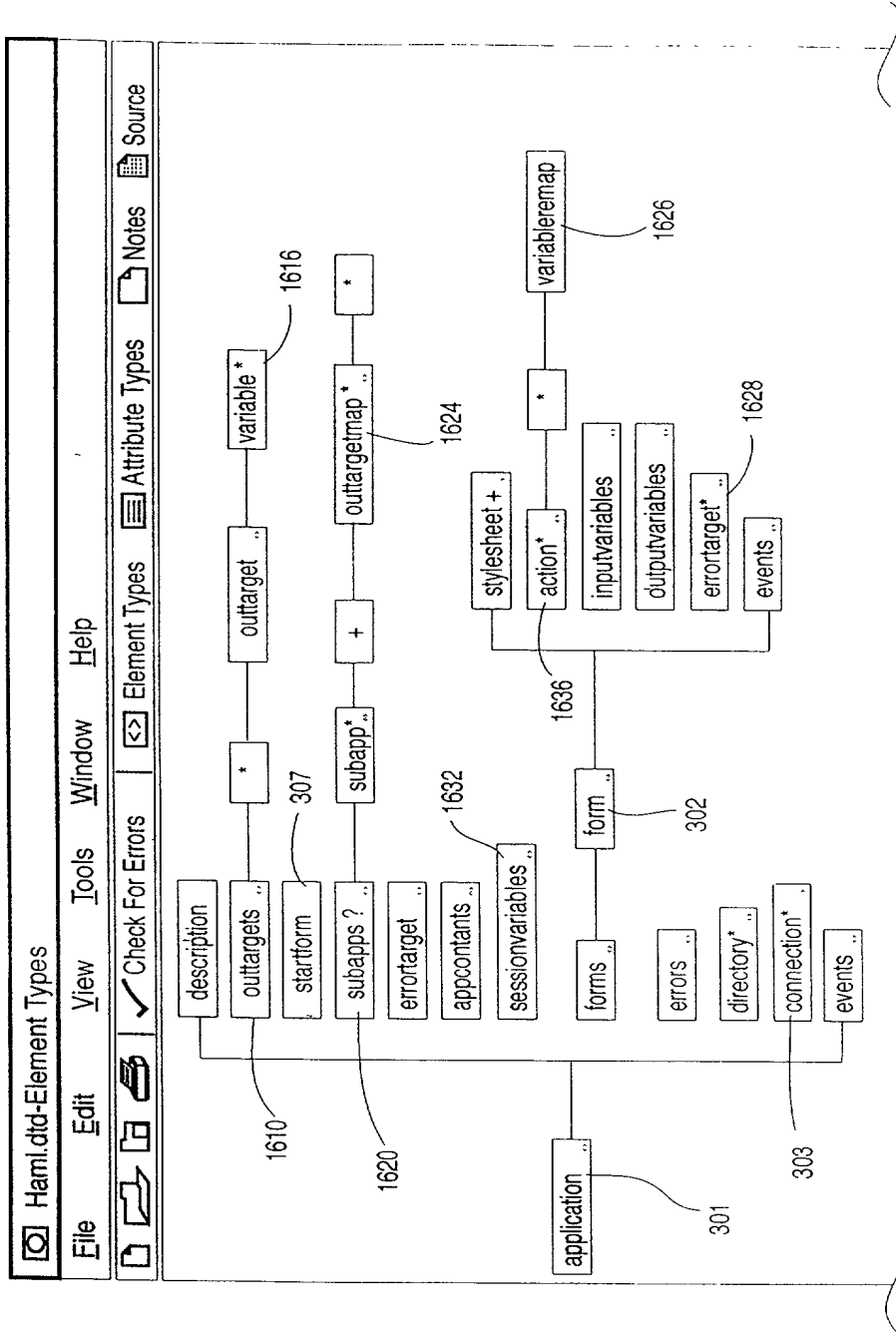


Figure 16 b

Element Types		Text	Elem	Data	Content Model	Attributes
<ul style="list-style-type: none"> application outtarget sessionvariables variable 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(description, outtargets, startform, subapps?, err (variable*) (variable)*)	securevariable targetid name default required
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Receive request:

- Determine request signature
 - app
 - targetid
 - language
 - markup
- Add to Runtime XML (RML)
 - Request signature
 - Dictionary element containing the Name/value pairs from request
- Load app
- Pass RML to app
- Process app
 - Find targetid?
 - Subapp
 - Load subapp
 - Pass RML to app
 - Process app
 - Form
 - Generate Action urls and add them to the RML
 - If no cookies
 - Include all variables
 - Remap to new names as described in HAML
 - Find a StyleSheet that matches the language and markup requested
 - Process Stylesheet
- If cookies are on and the device supports cookies
 - Build cookie creation instructions for
 - Out variables in the RML
 - Remap to new names as described in HAML
 - Session variables in the RML
 - Remap to new names as described in HAML
- Return generated markup

Figure 17